RESEARCH DEPARTMENT

LOCHGILPHEAD V.H.F. RELAY STATION: SUMMARY OF INSTALLATION

Technological Report No. RA-19/9
UDC 621.396.712 1968/34

It uses SI units in accordance with B.S. document PD 5686.

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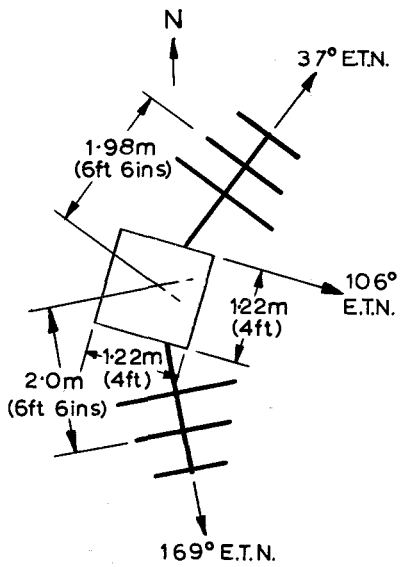
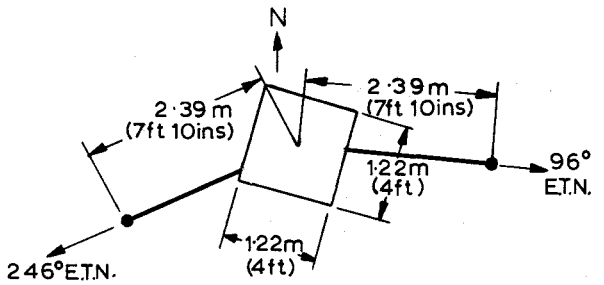
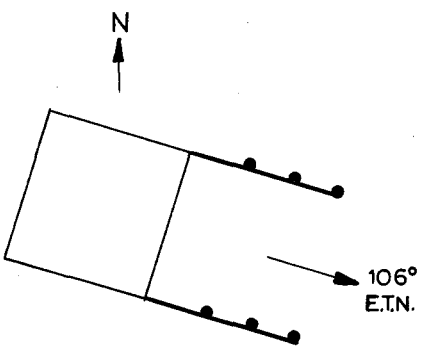
for Head of Research and Development



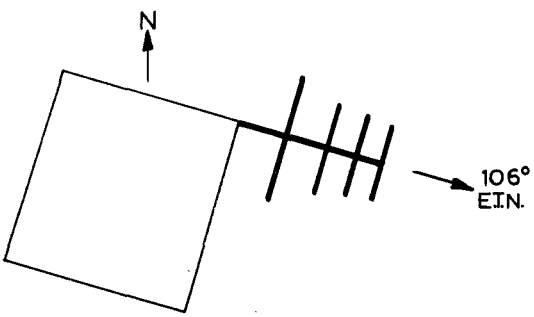
Plan of Band II transmitting aerial



Plan of Band I transmitting aerial



Plan of Band I receiving aerial



Plan of Band II receiving aerial

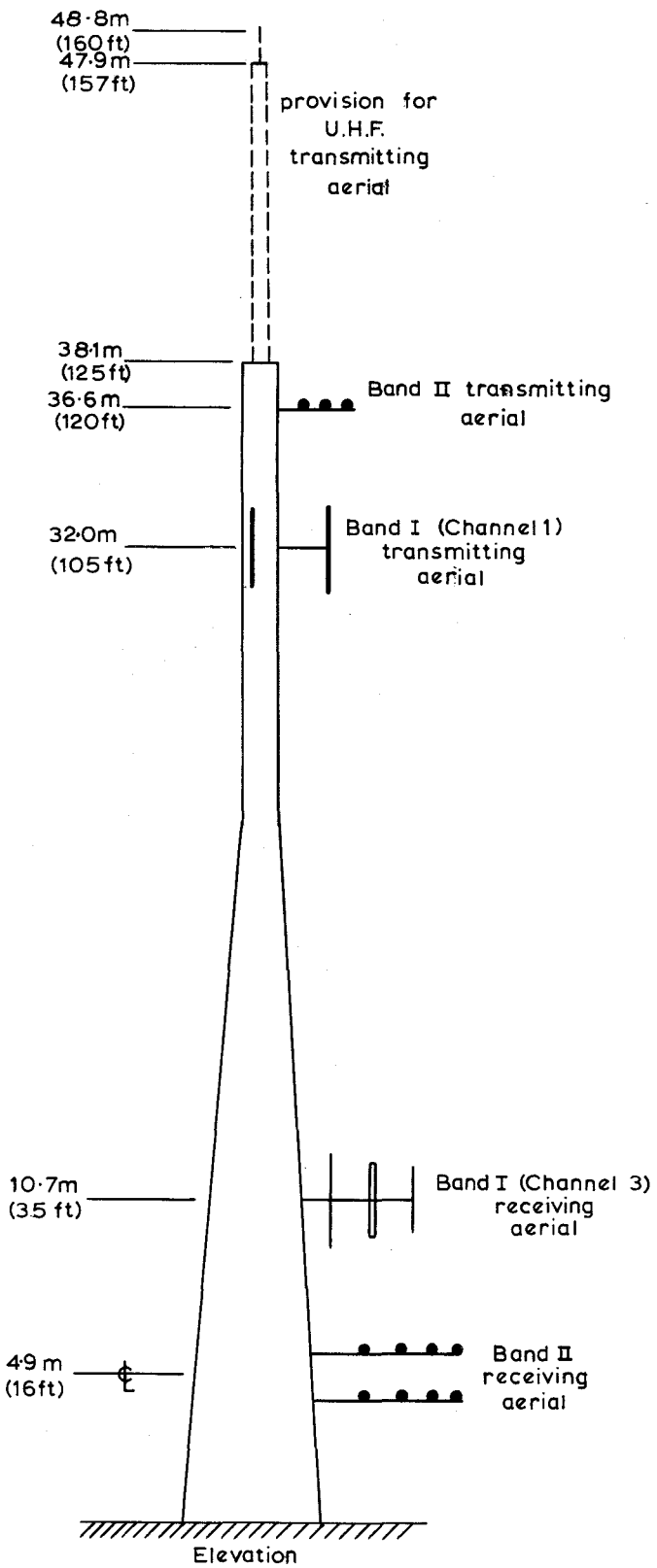


Fig. 1. General arrangement of aerials on tower

BRITISH BROADCASTING CORPORATION
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TECHNOLOGICAL REPORT
1968/34
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TELEVISION

NAME: Lochgilphead

SERVICE TRANSMISSIONS COMMENCED: 8th May 1967

SITE DATA

LOCATION: Approximately 2.5 km (1.5 miles) south-west of Lochgilphead

GRID REFERENCE: NR 84986O

HEIGHT, A.O.D.: 50 m (165 ft)

SUPPORT STRUCTURE

TYPE: Self-supporting tower

OVERALL HEIGHT: 38.1 m (125 ft)

GENERAL ARRANGEMENT

FIGURE: 1

FREQUENCIES

BAND: I

CHANNEL: 1

VISION CARRIER OFFSET: +16.875 kHz

SOUND CARRIER OFFSET: +16.875 kHz

TRANSMITTER

POWER: 10W (translator)

NOTES:

TRANSMITTING AERIAL

DESCRIPTION: Vertical $\lambda/2$ dipoles with tower screening

NUMBER OF TIERS: 1

MEAN HEIGHT: 32 m (105 ft) a.g.l.

FEEDERS

TRANSMITTING: RBC 2603

RADIATION CHARACTERISTICS

POLARIZATION: Vertical

MEAN E.R.P.: 7.1W

MAXIMUM E.R.P.: 19.5W

H.R.P.: Fig.2

PROGRAMME SOURCE

PARENT: Kirk o'Shotts
obtained by direct reception

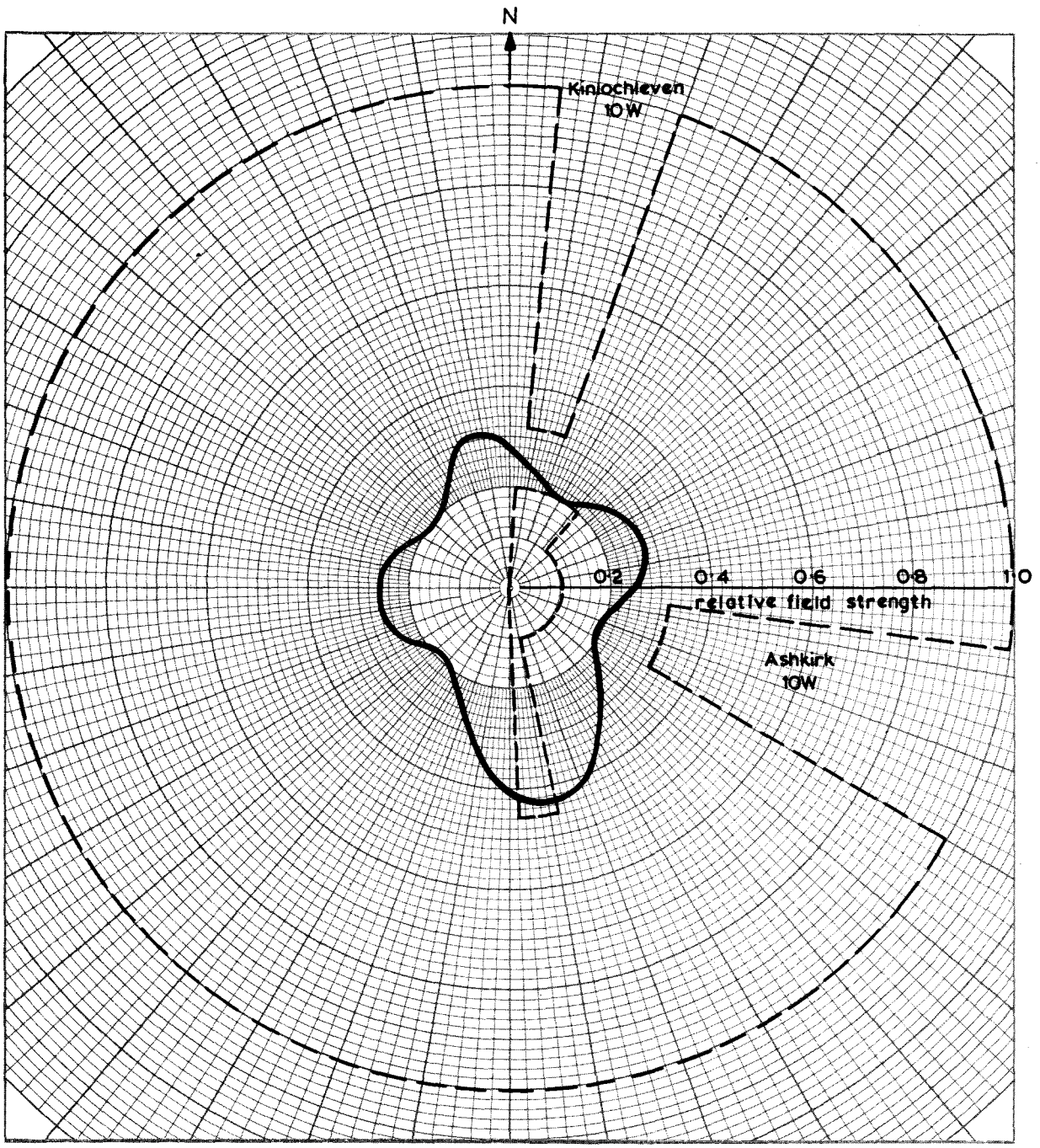

Fig. 2. Band I templet and horizontal radiation pattern.

——— Maximum permissible E.R.P.

— — — — Minimum desirable E.R.P.

Unit field corresponds to an E.R.P. of 100W

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TECHNOLOGICAL REPORT
1968/34
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V.H.F. RELAY STATIONS : SUMMARY OF INSTALLATION
SOUND

NAME: **Lochgilphead**

SERVICE TRANSMISSIONS COMMENCED: **8th May 1967**

BAND II FREQUENCIES

RADIO 2: **88.3 MHz**

RADIO 3: **90.5 MHz**

RADIO 4: **92.7 MHz**

TRANSMITTER

POWER: **10W (translator)**

TRANSMITTING AERIAL

DESCRIPTION: **Horizontal three-element Yagis**

NUMBER OF TIERS: **1**

MEAN HEIGHT: **36.6 m (120 ft) a.g.l.**

FEEDERS

TRANSMITTING: **RPC 2603**

RADIATION CHARACTERISTICS

POLARIZATION: **Horizontal**

MEAN E.R.P.: **3.3W**

MAXIMUM E.R.P.: **10W**

H.R.P.: **Fig.3**

PROGRAMME SOURCE

PARENT: **Kirk o'Shotts**
obtained by direct reception

NOTES:

1. Detailed information is given on the following drawings held by BBC Transmitter Planning and Installation Department:

   PID 977.2.1A4 General Arrangement of Aerials on 125 ft Standard Tower
   PID 8732.2.3J Band I Dipole, Type HPN
   PID 8732.2.4A2 Band I Yagi, Type 353P
   PID 8732.2.5A2 Band II Yagi, Type 453P

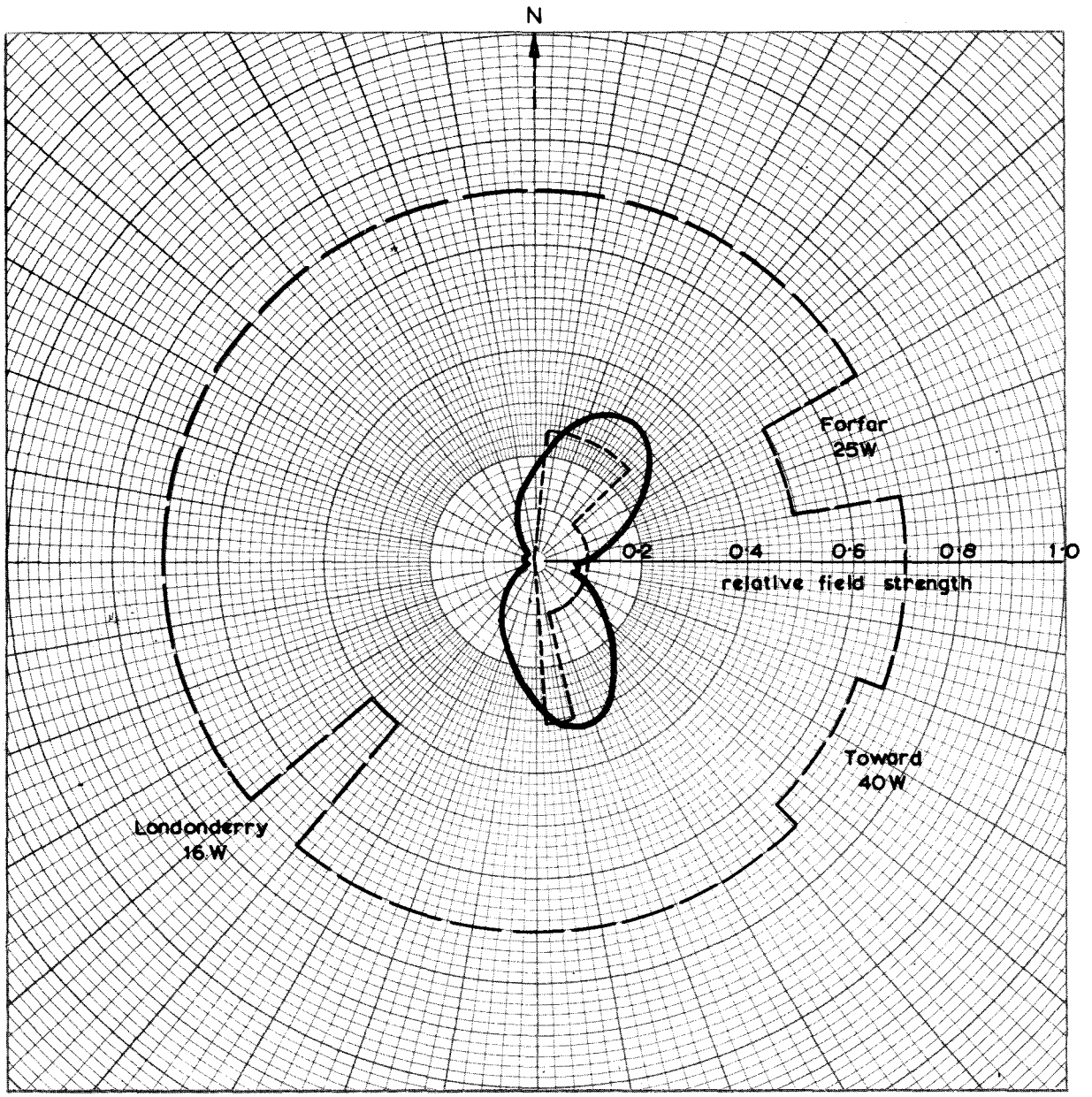

Fig. 3. Band II templet and horizontal radiation pattern.

——— Maximum permissible E.R.P.

– – – – – Minimum desirable E.R.P.

Unit field corresponds to an ERP of 100W.

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